CLAIMS

1. A connector assembly for removably interconnecting first conductors of a flat flexible circuit to a plurality of second conductors without the use of conductive terminals, comprising:

a male connector including a relatively rigid male body member having an edge about which the flexible circuit is wrapped with the first conductors of the circuit facing away from the body member at the edge thereof; and

an adapter including a first receptacle for receiving the male connector inserted edge-first into the first receptacle, and a second receptacle for receiving the second conductors in position for engaging the first conductors of the flexible circuit at the edge of the male body member.

2. The connector assembly of claim 1, including a relatively yieldable backing structure on the male body member at the edge thereof beneath the flexible circuit for resiliently biasing the first conductors of the circuit against the second conductors.

3. The connector assembly of claim 2 wherein said male body member is elongated and said yieldable backing structure comprises a longitudinal resilient strip along said edge.

4. The connector assembly of claim 1, including positioning means on the male body member for locating the flexible circuit wrapped about said edge of the body member.

5. The connector assembly of claim 4 wherein said positioning means comprises an adhesive between the male body member and the flexible circuit.

6. The connector assembly of claim 1 wherein said male body member includes a forward body part having said edge about which the flexible circuit is wrapped and a rearward body part latched to the adapter, and spring means between the forward and rearward body parts to bias the forward body part and, thereby, the first conductors of the flexible circuit against the second conductors.

7. In combination with the connector assembly of claim 1, a printed circuit board inserted into the second receptacle of the adapter, the printed circuit board having said second conductors engageable with the first conductors of the flexible circuit.

8. In combination with the connector assembly of claim 1, including a second flat flexible circuit inserted into the second receptacle of the adapter, the second flexible circuit having said second conductors engageable with said first conductors.

9. In combination with the connector assembly of claim 1, including a plurality of discrete electrical wires inserted into the second receptacle of the adapter, the discrete electrical wires having said second conductors engageable with the first conductors of the flexible circuit.

10. A connector assembly for removably interconnecting first conductors of a flat flexible circuit to a plurality of second conductors without the use of conductive terminals, comprising:

a male connector having a two-part relatively rigid male body member including

a flat forward body part having an edge about which the flexible circuit is wrapped with the first conductors of the circuit facing away from the forward body part at the edge thereof,

a relatively yieldable backing structure on the forward body part at the edge thereof beneath the flexible circuit,

a rearward body part having latch means thereon,

spring means interposed between the forward and rearward body parts, and

positioning means on at least one of the forward and rearward body parts for locating the flexible circuit wrapped about said edge of the forward body part; and

an adapter including a first receptacle for receiving the male connector inserted edge-first into the first receptacle, and a second receptacle for receiving the second conductors in position for engaging the first conductors of the flexible circuit at the edge of the forward body part of the male body member,

the adapter having latch means for engaging the latch means of the rearward body part of the male body member to fix the rearward body part, whereby said spring means biases the forward body part and the first conductors of the flexible circuit against the second conductors.

11. The connector assembly of claim 10 wherein said male body member is elongated and said yieldable backing structure comprises a longitudinal resilient strip along said edge.

12. The connector assembly of claim 10 wherein said positioning means comprises an adhesive between the male body member and the flexible circuit.

13. In combination with the connector assembly of claim 10, a printed circuit board inserted into the second receptacle of the adapter, the printed circuit board having said second conductors engageable with the first conductors of the flexible circuit.

14. In combination with the connector assembly of claim 10, including a second flat flexible circuit inserted into the second receptacle of the adapter, the second flexible circuit having said second conductors engageable with said first conductors.

15. In combination with the connector assembly of claim 10, including a plurality of discrete electrical wires inserted into the second receptacle of the adapter, the discrete electrical wires having said second conductors engageable with the first conductors of the flexible circuit.

16. A connector assembly for interconnecting first conductors of a flat flexible circuit to a plurality of second conductors without the use of conductive terminals, comprising:

a male connector including a relatively rigid male body member having an edge about which the flexible circuit is wrapped with the first conductors of the circuit facing away from the body member at the edge thereof; and

a female connecting device including a receptacle for receiving the male connector inserted into the receptacle, and means on the device for positioning said second conductors in engagement with the first conductors of the flexible circuit at the edge of the male body member.

17. The connector assembly of claim 16, including a relatively yieldable backing structure on the male body member at the edge thereof beneath the flexible circuit for resiliently biasing the first conductors of the circuit against the second conductors.

18. The connector assembly of claim 17 wherein said male body member is elongated and said yieldable backing structure comprises a longitudinal resilient strip along said edge.

19. The connector assembly of claim 16, including positioning means on the male body member for locating the flexible circuit wrapped about said edge of the body member.

20. The connector assembly of claim 19 wherein said positioning means comprises an adhesive on the male body member adhering the flexible circuit thereto.

21. The connector assembly of claim 16 wherein said male body member includes a forward body part having said edge about which the flexible circuit is wrapped and a rearward body part latched to the female connecting device, and spring means between the forward and rearward body parts to bias the forward body part and, thereby, the first conductors of the flexible circuit against the second conductors.

22. In combination with the connector assembly of claim 16, a printed circuit board inserted into the receptacle of the female connecting device, the printed circuit board having said second conductors engageable with the first conductors of the flexible circuit.

23. In combination with the connector assembly of claim 16, including a second flat flexible circuit inserted into the receptacle of the female connecting device, the second flexible circuit having said second conductors engageable with said first conductors.

24. In combination with the connector assembly of claim 16, including a plurality of discrete electrical wires inserted into the receptacle of the female connecting device, the discrete electrical wires having said second conductors engageable with the first conductors of the flexible circuit.